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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/601,161	06/20/2003	Thomas T. Mabry	ITDE-PNV105US	7524
23122	7590 05/10/2006		EXAMINER	
RATNERPRESTIA			HOFFMANN, JOHN M	
P O BOX 980 VALLEY FORGE, PA 19482-0980			ART UNIT PAPER NUMBER	
	,		1731	
			DATE MAILED: 05/10/2006	

Please find below and/or attached an Office communication concerning this application or proceeding.

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		Application No.	Applicant(s)				
Office Action Summary		10/601,161	MABRY, THOMAS T.				
		Examiner	Art Unit				
		John Hoffmann	1731				
Period fo	The MAILING DATE of this communication app or Reply	ears on the cover sheet with the o	correspondence address				
WHIC - Exter after - If NC - Failu Any (	ORTENED STATUTORY PERIOD FOR REPL' CHEVER IS LONGER, FROM THE MAILING Donsions of time may be available under the provisions of 37 CFR 1.1: SIX (6) MONTHS from the mailing date of this communication. To period for reply is specified above, the maximum statutory period of the toreply within the set or extended period for reply will, by statute reply received by the Office later than three months after the mailing and patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tinuity will apply and will expire SIX (6) MONTHS from the application to become ABANDONE	N. mely filed . n the mailing date of this communication ED (35 U.S.C. § 133).				
Status			•				
1)	Responsive to communication(s) filed on	_•					
2a)	This action is FINAL. 2b) This action is non-final.						
3)	Since this application is in condition for allowance except for formal matters, prosecution as to the ments is						
	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Dispositi	ion of Claims						
4) Claim(s) 1-18 is/are pending in the application.  4a) Of the above claim(s) is/are withdrawn from consideration.  5) Claim(s) is/are allowed.							
•	Claim(s) is/are allowed:  Claim(s) is/are rejected.  Claim(s) is/are objected to:						
·							
8)🛛	Claim(s) $\frac{11-18}{}$ are subject to restriction and/or	election requirement.					
Applicati	ion Papers						
_	The specification is objected to by the Examine	or .					
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.							
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
	Replacement drawing sheet(s) including the correct	ion is required if the drawing(s) is of	bjected to. See 37 CFR 1.121(c	I).			
11)	The oath or declaration is objected to by the Ex	caminer. Note the attached Office	e Action or form PTO-152.				
Priority (	under 35 U.S.C. § 119		•				
	Acknowledgment is made of a claim for foreign ☐ All b)☐ Some * c)☐ None of:	priority under 35 U.S.C. § 119(a	a)-(d) or (f).				
	1. Certified copies of the priority documents have been received.						
	2. Certified copies of the priority document	• •					
	3. Copies of the certified copies of the prio		ed in this National Stage				
	application from the International Bureau	•					
* 8	See the attached detailed Office action for a list .	of the certified copies not receiv	ea. '				
Attachmen		" <b></b>					
	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948)	4) Interview Summan Paper No(s)/Mail D					
3) 🔲 Infor	mation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) or No(s)/Mail Date		Patent Application (PTO-152)				

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## **DETAILED ACTION**

## Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-9, drawn to a boule, classified in class 428, subclass 428.
- II. Claims 10 and 18, drawn to a microchannel plate, classified in class 313, subclass 537.
- III. Claims 11-17, drawn to a method of making a microchannel plate, classified in class 65, subclass 412.

The inventions are distinct, each from the other because of the following reasons:

Inventions I and II are related as mutually exclusive species in an intermediate-final product relationship. Distinctness is proven for claims in this relationship if the intermediate product is useful to make other than the final product, and the species are patentably distinct (MPEP § 806.05(j)). In the instant case, the intermediate product is deemed to be useful as a boule for photonic crystals and the inventions are deemed patentably distinct because there is nothing on this record to show them to be obvious variants.

Inventions III and (I) are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make another and materially different product or (2) that the product as claimed can be made by another and materially different process

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(MPEP § 806.05(f)). In the instant case the product can be used for a materially different process – such as serving as a conduit for liquids, gas, or wires.

Inventions III and II are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make another and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the process can be used to make materially different product – such as a photonic crystal.

Because these inventions are independent or distinct for the reasons given above and have acquired a separate status in the art in view of their different classification, restriction for examination purposes as indicated is proper.

Because these inventions are independent or distinct for the reasons given above and the inventions require a different field of search (see MPEP § 808.02), restriction for examination purposes as indicated is proper.

Because these inventions are independent or distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

IF APPLICANT chooses Group I, then:

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The following applies:

This application contains claims directed to the following patentably distinct species: Specie A, wherein the boule is hollow (i.e. empty, except for maybe gas), at least claim 1; specie B, wherein the boule is filled with multiple items (i.e. loose fibers), at least claim 2; specie C, wherein the boule is a substantially solid – all fused item, at least claim 8. The related inventions are distinct if the inventions as claimed do not overlap in scope, i.e., are mutually exclusive; the inventions as claimed are not obvious variants; and the inventions as claimed are either not capable of use together or can have a materially different design, mode of operation, function, or effect. See MPEP § 806.05(j). The species are independent or distinct because they are mutually exclusive.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, no claim is generic.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which depend from or otherwise require all the limitations

of an allowable generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species.

MPEP § 809.02(a).

The above designations of what claims belong to what species, and what claims are generic are Examiner's best guess as to what was intended to be claimed. As an example, it appears that claim 8 fails to comply with 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim – because claim 1 requires the tube to be hollow (i.e. empty) but claim 8 is directed to the invention where the tube is filled. A tube cannot be both hollow and empty.

Regardless of whether the Office is correct with which claims correspond to which species, Applicant is required to elect one of the species, and a listing of all species readable thereon.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Hoffmann whose telephone number is (571) 272 1191. The examiner can normally be reached on Monday through Friday, 7:00- 3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steve Griffin can be reached on 571-272-1189. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

John Hoffmann

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jmh